

## AMENDMENTS TO THE CLAIMS

1. (Currently amended) A computer-implemented method of conducting an consecutive iterative betting process for investors, the computer having a betting exchange unit for performing the following steps:
  - 5 a) identifying an uncertain event having m potential outcomes  $O_1, \dots, O_m$ , where  $m \geq 2$ , and where the rate of return thereof is determined by market forces;
  - b) initializing a first betting cycle;
  - c) receiving bets  $B_1, \dots, B_m$  from the investors for each of the potential outcomes  $O_1, \dots, O_m$  during the first betting cycle to accumulate an initial bet total  $B_{tot}$ ;
  - 10 d) defining outcome share groups that correspond to  $O_1, \dots, O_m$  and issuing an equal numbers number of outcome shares  $OS(1), \dots, OS(m)$  of outcome shares to each of the outcome share groups such that  $OS(1)=\dots=OS(m)$ , the outcome shares corresponding to the potential outcomes  $O_1, \dots, O_m$ ;
  - e) assigning a share value  $SV$  to each of the outcome shares;
  - 15 f) assigning quote values  $Q_1, \dots, Q_m$  to each of the outcome shares such that  $Q_i = (SV * B_i) / B_{tot}, \dots, Q_m = (SV * B_m) / B_{tot}$ ; and
  - g) distributing the outcome shares to the investors;
  - 20 h) initializing a subsequent betting cycle;
  - i) receiving incoming money  $IM(1), \dots, IM(m)$  corresponding to subsequent bets  $B_1, \dots, B_m$  for  $O_1, \dots, O_m$ ;
  - j) receiving numbers  $IS(1), \dots, IS(m)$  of incoming shares for outcomes  $O_1, \dots, O_m$  from one or more withdrawing investors; and
  - 25 k) re-assigning the quote values  $Q_1, \dots, Q_m$  to preserve an equal number of outstanding shares in outcomes  $O_1, \dots, O_m$  such that  $OS(1)-IS(1)=\dots=OS(m)-IS(m)$ , wherein  $OS(i)$  are numbers of outcome shares for outcomes  $O_1, \dots, O_m$  newly issued during the subsequent betting cycle.
2. (Currently amended) The method of claim 1, further comprising the steps of:
  - g) g1) monitoring an actual outcome  $OA$  of the future uncertain event; and

h)-g2) selecting from among the outcome shares winning shares WS from the outcome share groups that corresponding to the actual outcome OA; and  
g3) determining a number of winning shares NWS.

3. (Original) The method of claim 2, wherein the number of winning shares NWS is  
5 selected such that  $NWS \cdot SV = B_{tot}$ .

4. Cancelled.

5. (Currently amended) The method of claim 2, wherein the step of monitoring the  
10 actual outcome OA is performed by a data acquisition unit.

6. (Original) The method of claim 1, wherein the investors comprise real investors and  
artificial investors.

7. (Original) The method of claim 6, wherein at least one artificial betting entity places a  
minimum initial bet  $B_{min}$  on any of the potential outcomes  $O_1, \dots, O_m$  for which  
corresponding initial bets  $B_1, \dots, B_m$  are zero.  
15

8. (Original) The method of claim 6, wherein the real investors are connected to the  
betting exchange unit by a communication network.

9. (Currently amended) The method of claim 1, the method further comprising the  
following steps:

- 20 i) initializing a subsequent betting cycle;  
j) receiving amounts of money  $IM(1), \dots, IM(m)$  corresponding to subsequent bets  
 $B_1, \dots, B_m$  from the investors on each of the potential outcomes  $O_1, \dots, O_m$   
during the subsequent betting cycle;  
k) receiving numbers  $IS(1), \dots, IS(m)$  of incoming shares in outcomes  $O_1, \dots, O_m$ ,  
from the investors during the subsequent betting cycle; and

- 1) ~~re assigning the quote values  $Q_1, \dots, Q_m$  to preserve an equal number of outstanding shares in outcomes  $O_1, \dots, O_m$  such that  $OS(1) \cdot IS(1) = \dots = OS(m) \cdot IS(m)$ , wherein  $OS(i)$  are numbers of outcome shares for outcomes  $O_1 \dots O_m$  newly issued during the subsequent betting cycle~~
- 5       m) reiterating the subsequent betting cycle until the uncertain event occurs.
10. (Currently amended) The method of claim 9-1, wherein the numbers of incoming outcome shares  $IS(i)$  and newly issued outcome shares  $OS(i)$  exchanged are in accordance with the reassigned quote values  $Q_1, \dots, Q_m$ .
11. (Currently amended) The method of claim 9-1, further comprising the steps of:  
10       m) k1) monitoring an actual outcome OA of the future uncertain event; and  
n) k2) selecting from among the outcome share-winning shares WS from the outcome share groups that corresponding to the actual outcome OA; and  
k3) assigning a normalized share value SV to each of the winning shares WS.
12. (Original) The method of claim 11, wherein the normalized share value SV is selected  
15       such that  $NWS \cdot SV = B_{tot}$ , where NWS is the number of winning shares.
13. (Original) The method of claim 11 wherein said normalized share value SV is equal to a unit of currency.
14. (Currently amended) The method of claim 9, further comprising:  
20       g) determining amounts of outgoing money  $OM(1), \dots, OM(m)$  for each kind of outcome share group, wherein each amount of outgoing money  $OM(i)$  is determined by  $OM(i) = \frac{IM(i) \cdot IS(i)}{OS(i)}$ .
15. (Original) The method of claim 14, wherein the revised quotes  $Q_1 \dots Q_m$  are determined  
25       by  $Q_i = \frac{IM(i)}{OS(i)} = \frac{OM(i)}{IS(i)}$ .

16. (Currently amended) The method of claim 9-1, wherein step d) includes solving a polynomial of having  $m+1$  roots.
17. (Currently amended) A system for conducting an iterative betting process  
5 ~~for investors placing bets  $B_1, \dots, B_m$  on potential outcomes  $O_1, \dots, O_m$  of a future event, where  $m \geq 2$~~ , the system having:  
10 a) a bet placing means for ~~sending the bets  $B_1, \dots, B_m$  from the enabling one or more investors to place bets  $B_1, \dots, B_m$  on  $m$  potential outcomes  $O_1, \dots, O_m$  of an uncertain event, where  $m \geq 2$  and where the rate of return thereof is determined by market forces;~~  
b) a betting exchange unit for initiating a first betting cycle and receiving the bets  $B_1, \dots, B_m$  from the investors during the first betting cycle, the bets  $B_1, \dots, B_m$  accumulating to an initial bet total  $B_{tot}$ , the betting exchange unit further comprising:  
15 i) a computing unit for issuing equal numbers  $OS(1), \dots, OS(m)$  of outcome shares such that  $OS(1)=\dots=OS(m)$ , the outcome shares corresponding to the potential outcomes  $O_1, \dots, O_m$ , the computing unit assigning a share value  $SV$  to each of the outcome shares, the computing unit further assigning quote values  $Q_1, \dots, Q_m$  to each of the outcome shares  $OS(1), \dots, OS(m)$  such that  $Q_i=(SV*B_i)/B_{tot}, \dots, Q_m=(SV*B_m)/B_{tot}$ ; and  
20 ii) a distributing unit for distributing the outcome shares to the investors.  
25
18. (Currently amended) The system of claim 17, wherein the computing unit further comprises an interface for receiving an actual outcome  $OA$  of the future event, the computing unit selecting from among the outcome shares winning shares  $WS$  corresponding to the actual outcome  $OA$  and assigning a normalized share value  $SV$  to each of the winning shares  $WS$ .

19. (Currently amended) The system of claim 18, further comprising a data acquisition unit for monitoring the actual outcome ~~OA~~, the data acquisition unit being connected to the interface.

20. (Original) The system of claim 17, wherein the investors comprise real investors and  
5 artificial investors.

21. (Currently amended) The system of claim 17, wherein the bet placing means for sending the bets  $B_1, \dots, B_m$  comprises a communication network.

22. (Currently amended) The system of claim 17, wherein the betting exchange unit is programmed to initialize, conduct, and reiterate a subsequent betting cycle for receiving subsequent bets  $B_1, \dots, B_m$  from the investors placed on each of the potential outcomes  $O_1, \dots, O_m$  during the subsequent betting cycle and for receiving incoming shares  $IS(1), \dots, IS(m)$  from the withdrawing investors during the subsequent betting cycle, and the computing unit is programmed to re-assign the quote values  $Q_1, \dots, Q_m$  to preserve an equal number of outstanding shares in outcomes  $O_1, \dots, O_m$  such that  
10  
15

$$OS(1)-IS(1)=\dots=OS(m)-IS(m).$$

23. (Currently amended) The system of claim 22, wherein the computing unit further comprises an interface for receiving an actual outcome of the future uncertain event, the computing unit selecting from among the outcome shares winning shares  $WS$  corresponding to the actual outcome ~~OA~~ and ~~assigning a normalized share value  $SV$  to each normalizing values~~ of the winning shares  $WS$ .  
20

24. (Currently amended) The system of claim 23, further comprising a data acquisition unit for monitoring the actual outcome OA, the data acquisition unit being connected to the interface.